



533027

(43) International Publication Date
27 May 2004 (27.05.2004)

PCT

(10) International Publication Number
WO 2004/045197 A2(51) International Patent Classification⁷: H04N

Matthew [US/US]; 13245 LaCanada Boulevard, Fishers, IN 46038 (US). JUNKERSFELD, Phillip, Aaron [US/US]; 13232 Cameo Court, Carmel, IN 46033 (US).

(21) International Application Number: PCT/US2003/034644

(74) Agents: TRIPOLI, Joseph, S. et al.; c/o Thomson Licensing Inc., Two Independence Way, Suite #200, Princeton, NJ 08540 (US).

(22) International Filing Date: 31 October 2003 (31.10.2003)

(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/424,451 7 November 2002 (07.11.2002) US

(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,

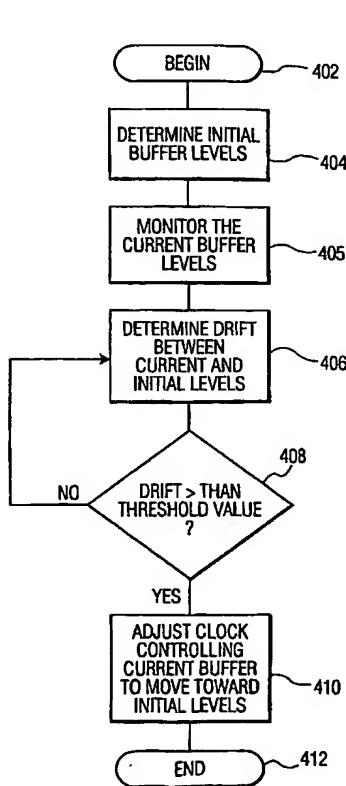
(71) Applicant (for all designated States except US): THOMSON LICENSING S.A. [FR/FR]; 46, Quai A. Le Gallo, F-92648 Boulogne (FR).

(72) Inventors; and

(75) Inventors/Applicants (for US only): JOHNSON, Devon,

[Continued on next page]

(54) Title: A SYSTEM AND METHOD FOR DETERMINING LIP SYNCHRONIZATION BETWEEN AUDIO AND VIDEO IN A DIGITIZED ENVIRONMENT USING BUFFER CALCULATION



(57) Abstract: The disclosed embodiments relate to a system (23) and method (400) for maintaining synchronization between a video signal (29) and an audio signal (31) that are processed using clocks that are locked. The system (23) may comprise a component (34) that determines at least one initial level of a buffer, a component (34) that determines at least one current level of the buffer, and a component (34) that determines an amount of drift by comparing the at least one initial level of the buffer to the at least one current level of the buffer and adjusts the clocks to maintain the initial midpoint level of the buffer if the amount of drift reaches a threshold level.



ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

Published:

- *without international search report and to be republished upon receipt of that report*